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| 10/599,992 | 10/17/2006 | Ferry Zijp | NL 040461 | 7925 |

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| EXAMINER | |
|---|---|
| DANIELSEN, NATHAN ANDREW | |
| ART UNIT | PAPER NUMBER |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/599,992 | ZIJP ET AL. | |
| | Examiner | Art Unit | |
| | Nathan A. Danielsen | 2627 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *17 October 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 October 2006* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

1. Claims 1-12 are pending.

### *Priority*

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Information Disclosure Statement*

3. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

4. The listing of references in the Search Report is not considered to be an information disclosure statement (IDS) complying with 37 CFR 1.98. 37 CFR 1.98(a)(2) requires a legible copy of:

(1) each foreign patent;

(2) each publication or that portion which caused it to be listed;

(3) for each cited pending U.S. application, the application specification including claims, and any drawing of the application, or that portion of the application which caused it to be listed including any claims directed to that portion, unless the cited pending U.S. application is stored in the Image File Wrapper (IFW) system; and

(4) all other information, or that portion which caused it to be listed.

In addition, each IDS must include a list of all patents, publications, applications, or other information submitted for consideration by the Office (see 37 CFR 1.98(a)(1) and (b)), and MPEP § 609.04(a), subsection I. states, "the list ... must be submitted on a separate paper." Therefore, the references cited in the Search Report have not been considered. Applicant is advised that the date of submission of any item of information or any missing element(s) will be the date of submission for

purposes of determining compliance with the requirements based on the time of filing the IDS, including all "statement" requirements of 37 CFR 1.97(e). See MPEP § 609.05(a).

***Drawings***

5. Figures 1A, 1B, 2A, 2B, 3, 4, 5, and 8 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

a. Regarding figures 1A and 1B, the term "typical" on page 1, line 15, in combination with the equations on page 1, lines 15-20, with those same equations being found in figures 1A and 1B, as well as the term "normal" on page 6, lines 24 and 25, indicate that figures 1A and 1B are "prior art";

b. Regarding figures 2A and 2B, the phrase "another proposed method" on page 2, line 1, in combination with the remainder of the paragraph on page 2, lines 1-10, and the suggested comparison between figures 1B and 2A, indicate that figures 2A and 2B are "prior art";

c. Regarding figure 3, the reference to figure 3 to explain figure 2B (see page 2, lines 18-20) indicates that figure 3 is "prior art";

d. Regarding figure 4, the phrase "Fig. 4 shows a measurement (taken from Ref. [1])" on page 3, line 5, in combination with the date associated with Ref. [1] on page 11, lines 3-5, indicate that figure 4 is "prior art";

e. Regarding figure 5, the discussion of thermal shielding on page 3, lines 29-31, and page 4, lines 11-18, indicates that figure 5 is "prior art"; and

f. Regarding figure 8, the phrase "In fig. 8, an example of a conventional S-curve type focus error signal" on page 9, lines 9-11, indicates that figure 8 is "prior art".

6. Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of

any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

7. The disclosure is objected to because it lacks appropriate section headings (note the following). Appropriate correction is required.

8. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

(a) TITLE OF THE INVENTION.

(b) CROSS-REFERENCE TO RELATED APPLICATIONS.

(c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.

(d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.

(e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.

(f) BACKGROUND OF THE INVENTION.

(1) Field of the Invention.

(2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.

(g) BRIEF SUMMARY OF THE INVENTION.

(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).

(i) DETAILED DESCRIPTION OF THE INVENTION.

(j) CLAIM OR CLAIMS (commencing on a separate sheet).

(k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

(l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

### *Claim Rejections - 35 USC § 112*

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 5-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

g. Regarding claims 5 and 6, the term "e.g.", which is short for "for example", renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

h. Claims 7-12 are rejected as being indefinite due to their dependence, either directly or indirectly, from an indefinite claim.

### *Claim Rejections - 35 USC § 103*

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baartman et al (US Patent 6,310,840; hereinafter Baartman), in view of Matsui (US Patent Application Publication 2002/0136147), and further in view of Ichimura et al (US Patent 6,307,689; hereinafter Ichimura '689).

Regarding claim 1, Baartman discloses an optical data storage system for recording and/or reading, using a radiation beam, having a wavelength λ, focused onto a data storage layer of an optical data storage medium (col. 4, line 66 through col. 5, line 31), said system comprising:

the medium having a cover layer that is transparent to the focused radiation beam (element 13 in figure 2 and col. 5, line 5; where element 13 meets the following definitions of "transparent" found at http://www.merriam-webster.com/dictionary/transparent: "having the property of transmitting light without appreciable scattering so that bodies lying beyond are seen clearly" and "allowing the passage of a specified form of radiation (as X-rays or ultraviolet light)"),

an optical head (element 17 in figure 2), including an objective having a numerical aperture NA (element 37 in figure 2 and col. 6, lines 20-32) and a solid immersion lens arranged on the cover layer side of said optical data storage medium (element 55 in figure 2 and col. 6, lines 20-28),

characterized in that the optical head comprises:

a first adjustable optical element corresponding to the solid immersion lens (element 57 in figure 2 and col. 6, lines 20-65),

means for axially moving the first optical element and dynamically keeping constant the distance between cover layer and solid immersion lens (element 51 in figure 2 and col. 6, lines 20-65),

a second adjustable optical element (element 61 in figure 2 and col. 6, line 66 through col. 7, line 31),

means for dynamically adjusting the second optical element for changing the focal position of the focal point of the focused radiation beam relative to an exit surface of the solid immersion lens (element 63 in figure 2 and col. 6, line 66 though col. 7, line 31).

However, Baartman fails to disclose where said solid immersion lens is adapted for being present at a free working distance of smaller than λ/10 from an outermost surface of said medium, and the focused

radiation beam is coupled by evanescent wave coupling from said solid immersion lens into the cover layer of the optical data storage medium during recording/reading.

In the same field of endeavor, Matsui discloses where the focused radiation beam is coupled by evanescent wave coupling from said solid immersion lens into the cover layer of the optical data storage medium during recording/reading (¶ 21).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the apparatus of Baartman with that of Matsui, for the purpose of increasing the data storage capacity of an optical recording medium (¶ 19). However, Matsui also fails to disclose where said solid immersion lens is adapted for being present at a free working distance of smaller than λ/10 from an outermost surface of said medium.

In the same field of endeavor, Ichimura '689 discloses where said solid immersion lens is adapted for being present at a free working distance of smaller than λ/10 from an outermost surface of said medium (col. 6, lines 58-67; where the preferred air gap is approximately 50 nm, which is 7.8% (and less than λ/10) of the disclosed irradiation wavelength of 640 nm).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the system of Baartman, as modified by Matsui, with that of Ichimura '689, for the purpose of maintaining high recording and reproduction precisions (col. 2, lines 29-45).

Regarding claim 2, Baartman, in view of Matsui and Ichimura '689, discloses everything claimed, as applied to claim 1. Additionally, Baartman discloses where the second optical element is present in the objective (note the relationship between elements 37 and 61 in figure 2 and col. 7, lines 32-37).

Regarding claim 3, Baartman, in view of Matsui and Ichimura '689, discloses everything claimed, as applied to claim 1. However, Baartman fails to disclose where the second optical element is present outside the objective.

In the same field of endeavor, Matsui discloses where the second optical element is present outside the objective (element 5 in figure 2; note where the second optical element in claim 1 is not claimed as an objective lens per se).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the apparatus of Baartman with that of Matsui, for the purpose of increasing the data storage capacity of an optical recording medium (¶ 19).

Regarding claim 4, Baartman, in view of Matsui and Ichimura '689, discloses everything claimed, as applied to claim 2. Additionally, Baartman discloses where the second optical element is axially movable with respect to the first optical element (col. 6, line 66 though col. 7, line 31).

13. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baartman, in view of Matsui and Ichimura '689, and further in view of Saito et al (US Patent Application Publication 2004/0145995; hereinafter Saito).

*Note that, although claim 6 looks like "an independent claim, drafted in a short-hand format to avoid rewriting the particulars" of claim 1, it has been treated as a proper dependent claim pursuant to Ex parte Porter, 25 USPQ2d 1144, 1147 (Bd. of Pat. App. & Inter. 1992) since it is narrower in scope and incorporates by reference all of the subject matter of claim 1.*

Regarding claim 6, Baartman, in view of Matsui and Ichimura '689, discloses everything claimed, as applied to claim 1. Additionally, Baartman discloses a method of optical recording and/or reading with a system as claimed in claim 1, wherein:

the free working distance is kept constant by using a first, relatively high bandwidth servo loop (col. 6, lines 20-65; where element 63 is driven based on a thickness error of element 13),

the first optical element is actuated based on the first servo loop (col. 6, lines 20-65),

a second, relatively high bandwidth servo loop is active based on a focus control signal (col. 6, lines 5-19; where the bandwidth for the servo loop is high enough to maintain a desired focusing condition with "a desired degree of accuracy"),

the second optical element is adjusted based on the second servo loop in order to retrieve an optimal modulated signal (col. 6, lines 5-19 in combination with col. 5, lines 55-65).

However, Baartman, in view of Matsui and Ichimura '689, fails to disclose where the free working distance is kept constant based on a gap error signal, e.g. derived from the amount of evanescent coupling between the solid immersion lens and the cover layer.

In the same field of endeavor, Saito discloses where the free working distance is kept constant based on a gap error signal, e.g. derived from the amount of evanescent coupling between the solid immersion lens and the cover layer (¶ 97).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the apparatus and functionality thereof of Baartman, as modified by Matsui and Ichimura '689, with that of Saito, for the purpose of servo-controlling the distance between an optical recording medium and a solid immersion lens (¶ 97).

14. Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baartman, in view of Matsui, Ichimura '689, and Saito, and further in view of Ichimura (US Patent 6,324,133; hereinafter Ichimura '133).

Regarding claim 7, Baartman, in view of Matsui, Ichimura '689, and Saito, discloses everything claimed, as applied to claim 6. However, Baartman, in view of Matsui, Ichimura '689, and Saito, fails to disclose where the focus control signal is derived from the modulation depth of a modulated signal recorded in the data storage layer.

In the same field of endeavor, Ichimura '133 discloses where the focus control signal is derived from the modulation depth of a modulated signal recorded in the data storage layer (col. 9, line 8 through col. 10, line 35 and figures 5 and 6; where the focus control signal is the focus offset derived by the method of figure 6, where the envelope of the RF signal is dependent on the modulation depth in that the modulation depth produces a reflected signal which oscillates between low and high levels, and where the high and low envelopes shown in figure 5B show the oscillations in these high and low levels, respectively).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the apparatus and functionality thereof of Baartman, as modified by Matsui,

Ichimura ‘689, and Saito, with that of Ichimura ‘133, for the purpose of quickly optimizing the distance between an objective lens and a solid immersion lens 9col. 2, lines 23-31).

Regarding claim 8, Baartman, in view of Matsui, Ichimura ’689, and Saito, discloses everything claimed, as applied to claim 6. However, Baartman, in view of Matsui, Ichimura ’689, and Saito, fails to disclose where the focus control signal is derived from an S-curve type focus error signal.

In the same field of endeavor, Ichimura ‘133 discloses where the focus control signal is derived from an S-curve type focus error signal (col. 6, equation 5; where this equation is known in the art to produce an S-curve at least equivalent to that shown in applicant’s prior art figure 8).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the apparatus and functionality thereof of Baartman, as modified by Matsui, Ichimura ‘689, and Saito, with that of Ichimura ‘133, for the purpose of quickly optimizing the distance between an objective lens and a solid immersion lens 9col. 2, lines 23-31).

Regarding claim 9, Baartman, in view of Matsui, Ichimura ‘689, Saito, and Ichimura ‘133, discloses everything claimed, as applied to claim 7. However, Baartman, in view of Matsui, Ichimura ‘689, and Saito, fails to disclose where an oscillation is superimposed on the adjustment of the second optical element and where the focus control signal additionally is derived from the oscillation direction of the second optical element.

In the same field of endeavor, where an oscillation is superimposed on the adjustment of the second optical element (col. 7, line 60 through col. 8, line 8 and figure 6) and where the focus control signal additionally is derived from the oscillation direction of the second optical element (col. 9, line 8 through col. 10, line 35 and figures 5 and 6; where the applied sine waveform causes the high and low envelopes of the RF signal to fluctuate, thus allowing for the optimization of the distance between the objective lens and the solid immersion lens).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the apparatus and functionality thereof of Baartman, as modified by Matsui, Ichimura ‘689, and Saito, with that of Ichimura ‘133, for the purpose of quickly optimizing the distance between an objective lens and a solid immersion lens (col. 2, lines 23-31).

Regarding claim 10, Baartman, in view of Matsui, Ichimura '689, Saito, and Ichimura '133, discloses everything claimed, as applied to claim 7. However, Baartman, in view of Matsui, Ichimura '689, and Saito, fails to disclose where the modulated signal is present as pre-recorded data in the optical data storage medium.

In the same field of endeavor, Ichimura '133 discloses where the modulated signal is present as pre-recorded data in the optical data storage medium (suggested by "a bit portion which has previously been recorded" in col. 11, lines 10-14).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the apparatus and functionality thereof of Baartman, as modified by Matsui, Ichimura '689, and Saito, with that of Ichimura '133, for the purpose of quickly optimizing the distance between an objective lens and a solid immersion lens (col. 2, lines 23-31).

15. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baartman, in view of Matsui, Ichimura '689, Saito, Ichimura '133, and further in view of Tsukamoto (US Patent Application Publication 2002/0141316).

Regarding claim 11, Baartman, in view of Matsui, Ichimura '689, Saito, and Ichimura '133, discloses everything claimed, as applied to claim 7. However, Baartman, in view of Matsui, Ichimura '689, and Saito, fails to disclose where the modulated signal is present in a lead-in area of the optical data storage medium. Although Ichimura '133 implies where "a bit portion [of a recordable optical disk] which has previously been embossed" can be used (which one of ordinary skill in the art would have known includes a lead-in area), Ichimura '133 fails to ***explicitly*** disclose where this embossed area is a lead-in area.

In the same field of endeavor, Tsukamoto discloses where the modulated signal is present in a lead-in area of the optical data storage medium (¶s 135 and 139).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the apparatus and functionality thereof of Baartman, as modified by Matsui,

Ichimura '689, Saito, and Ichimura '133, with that of Tsukamoto, for the purpose of reproducing various (control) data from a recordable optical medium (¶ 135).

Regarding claim 12, Baartman, in view of Matsui, Ichimura '689, Saito, and Ichimura '133, discloses everything claimed, as applied to claim 7. However, Baartman, in view of Matsui, Ichimura '689, and Saito, fails to disclose where the modulated signal is present as a wobbled track of the optical data storage medium. Although Ichimura '133 implies where "a recorded signal portion [of a recordable optical disk]" can be used (which one of ordinary skill in the art would have known includes a wobbled track), Ichimura '133 fails to *explicitly* disclose where this recorded signal portion is a wobbled track.

In the same field of endeavor, Tsukamoto discloses where the modulated signal is present as a wobbled track of the optical data storage medium (¶s 135 and 139).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the apparatus and functionality thereof of Baartman, as modified by Matsui, Ichimura '689, Saito, and Ichimura '133, with that of Tsukamoto, for the purpose of reproducing various (control) data from a recordable optical medium (¶ 135).

***Double Patenting***

16. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

17. Claims 1-7 and 9-12 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-12 of copending Application No. 10/599, 991. Although the conflicting claims are not identical, they are not patentably distinct from each other because the copending application claims include all of the limitations of the instant application claims, respectively. The copending application claims also include additional limitations. Hence, the instant application claims are generic to the species of invention covered by the respective copending application claims. As such, the instant application claims are anticipated by the copending application claims and are therefore not patentably distinct therefrom. (See Eli Lilly and Co. v. Barr Laboratories Inc., 58 USPQ2D 1869, "a later genus claim limitation is anticipated by, and therefore not patentably distinct from, an earlier species claim", In re Goodman, 29 USPQ2d 2010, "Thus, the generic invention is 'anticipated' by the species of the patented invention" and the instant "application claims are generic to species of invention covered by the patent claim, and since without terminal disclaimer, extant species claims preclude issuance of generic application claims").

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Regarding claim 1, 10/599,991 claims every limitation in claims 1 and 3.

Regarding claim 2, 10/599,991 claims every limitation in claim 4.

Regarding claim 3, 10/599,991 claims every limitation in claim 5.

Regarding claim 4, 10/599,991 claims every limitation in claim 6.

Regarding claim 5, 10/599,991 claims every limitation in claim 7.

Regarding claim 6, 10/599,991 claims every limitation in claim 8.

Note that although claim 6 in the instant application claims "relatively high bandwidth servo loops" while claims 1, 3, and 8 in 10/599,991 claims high and low bandwidth servo loops, applicant has defined "relatively high" to mean "a normal optical recording focus servo bandwidth" (see page 6, lines 1 and 2). Therefore, since col. 7, line 65 through col. 8, line 62 of Baartman suggest that the various servo loops must be able to track both low-frequency and high frequency changes, these various servo loops serve as examples of applicant's claimed "relatively high bandwidth servo loops", as defined in applicant's specification, which are seen to be no different form those claimed in 10/599,991.

Regarding claim 7, 10/599,991 claims every limitation in claim 8.

Regarding claim 9, 10/599,991 claims every limitation in claim 9.

Regarding claim 10, 10/599,991 claims every limitation in claim 10.

Regarding claim 11, 10/599,991 claims every limitation in claim 11.

Regarding claim 12, 10/599,991 claims every limitation in claim 12.

18. Claim 8 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-12 of copending Application No. 10/599,991 in view of Ichimura '133.

This is a provisional obviousness-type double patenting rejection.

Regarding claim 8, 10/599,991 claims everything, as applied to claim 6. However, 10/599,991 does not claim where the focus control signal is derived from an S-curve type focus error signal.

In the same field of endeavor, Ichimura '133 discloses where the focus control signal is derived from an S-curve type focus error signal (col. 6, equation 5; where this equation is known in the art to produce an S-curve at least equivalent to that shown in applicant's prior art figure 8).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the apparatus and functionality thereof as claimed in 10/599,991with that of Ichimura '133, for the purpose of quickly optimizing the distance between an objective lens and a solid immersion lens 9col. 2, lines 23-31).

***Allowable Subject Matter***

19. Claim 5 would be allowable:

i. if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, forth in this Office action; and

j. if rewritten to overcome the double patenting rejection set forth in this Office action or upon the filing of an acceptable terminal disclaimer disclaiming the terminal portion of any patent granted on copending application 10/599,991; and

k. if rewritten to include all of the limitations of the base claim and any intervening claims.

20. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record, either alone or in combination, fails to teach or fairly suggest, in claim 5, "wherein the second optical element has a focal length which is electrically adjustable", in combination with all the limitations found in claims 1 and 2.

***Relevant Prior Art***

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

l. Matsui and Feenstra et al (International Patent Application Publication WO 03/069380; hereinafter Feenstra) disclose optical recording/reproducing apparatuses which utilize a liquid crystal element to adjust the focal position/depth. However, Matsui and Feenstra fail to disclose where this liquid crystal element is located in the objective along with a solid immersion lens.

***Closing Remarks/Comments***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan A. Danielsen whose telephone number is (571)272-4248. The examiner can normally be reached on Monday-Friday, 9:00 AM - 5:00 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, A.L. Wellington can be reached on (571) 272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nathan A. Danielsen/
Examiner, Art Unit 2627
02/22/2010